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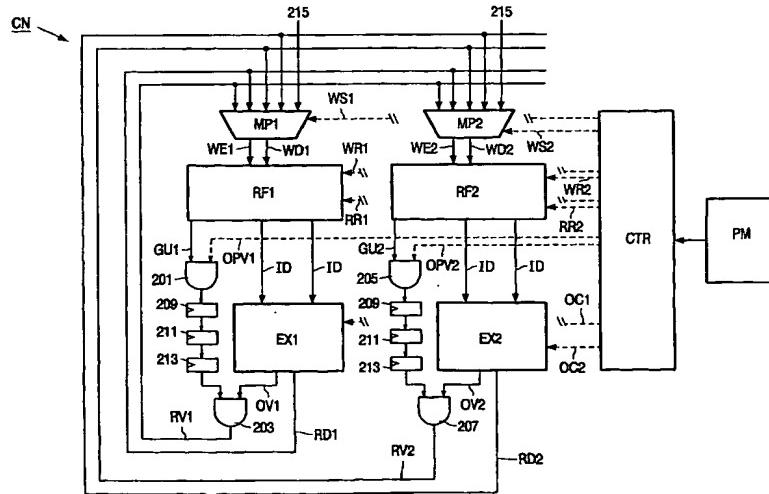
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(54) Title: SUPPORT FOR CONDITIONAL OPERATIONS IN TIME-STATIONARY PROCESSORS



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(57) Abstract: In case of time-stationary encoding, every instruction that is part of the processor's instruction-set controls a complete set of operations that have to be executed in a single machine cycle. These operations may be processing several different data items traversing the data pipeline. Time-stationary encoding is often used in application-specific processors, since it saves the overhead of hardware necessary for delaying the control information present in the instructions, at the expense of larger code size. A disadvantage of time-stationary encoding is that it does not support conditional operations. The invention proposes to dynamically control the write back of result data to the register file of the timestationary processor, using control information obtained by the program. By controlling the write back of data at run-time, conditional operations can be implemented by a timestationary processor.



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